

REMARKS

Claims 1, 2, 5, 7-17, 20, 22-36, 40, and 43-45 are pending but stand rejected. Claims 3, 4, 6, 18, 19, 21, 37, 38, 39, 41 and 42 have been cancelled. Claims 1, 5, 7-11, 16, 20, 26, 9, 10, 11, 16, 17, 20, 22-26, 31, 32, 35, 36, 40, and 43-45 have been amended. In view of the amendments and the following remarks, the Applicant requests the Examiner's thoughtful reconsideration.

The present application finds particular use in an environment in which a user is printing a sensitive job in a public or other non-secure environment such as an office with a shared printer. It is not uncommon that the printer will malfunction after the user issues a print command but before the job is printed. If the user cannot clear the malfunction and help is not available, the user may choose to reprint the job using a second printer. At a later time when the malfunction is cleared, the job may also be printed at the first printer. Due to its sensitive nature, this can pose problems for the user. Embodiments allow for the purging of the job sent to the first printer if the duration of the malfunction exceeds a duration indicated by expiration data included in the print job. In other words, a time elapsed following the detection of a malfunction is monitored. If that elapsed time exceeds the indicated duration, the print job is purged

Explained in more detail below, the references cited by the Examiner fail to teach or suggest identifying the duration of a malfunction and then deleting a print job if the malfunction duration exceeds a duration indicated by the print job.

Rejections Under 35 U.S.C. §103

The Examiner rejected Claims 1, 2, 5-8, 11-17, 20-23, 36, and 37 as being unpatentable over US Pub 2003/0065404 to Bhatti in view of US Pub 2003/0112464 to Garcia.

Claim 1 is, as amended, directed to a computer readable medium having instructions for the following.

1. detecting a triggering event,

2. determining if a print job designated time sensitive has expired following the detected triggering event; and
3. purging the print job from a memory upon determining the print job has expired;
4. wherein the detected triggering event is a malfunction that prevents, at least temporarily, the print job from being delivered to or printed by a printer; and
5. wherein determining if the print job has expired includes identifying a time elapsed following the detection of the malfunction and determining if the identified elapsed time has exceeded a duration indicated by expiration data included with the print job.

Claim 1 was amended to clarify that the act of determining if the print job has expired include comparing a time elapsed following the malfunction detection and a duration indicated by the print job. If the elapsed time exceeds the indicated duration, the print job has expired and is purged.

Bhatti describes the ability to designate a print job as a “Stored Job” and to specify an expiration data for that stored job. See Bhatti, Fig. 3. Such a job is retained at the printer for repeated future uses until the expiration date. As noted by the Examiner, Bhatti mentions nothing of detecting a malfunction or purging the print job as a result of detecting a malfunction. Bhatti simply describes purging a print job upon reaching the expiration date.

Garcia also mentions nothing of identifying a time elapsed following detection of a printer error or deleting a job if the elapsed time exceeds a duration indicated by the print job. Instead, Garcia describes deleting all print jobs if they are not printed within a threshold time after being received. Garcia, paragraph [0065]. Such may be the result of a malfunction. Garcia, paragraphs [0075]-[0076].

In a prior office action, the Examiner cited US Pub 2003/0105995 to Schroath. Schroath also mentions nothing of identifying a time elapsed following detection of a printer error or deleting a job if the elapsed time exceeds a duration indicated by the print job. Instead, Schroath describes detecting certain statistics concerning printer

errors. See Schroath, Fig. 3. Those statistics include the number of consecutive times the error has occurred and the number of times the error has occurred in a set time frame. If certain thresholds are not met, the printer is simply rebooted. If the thresholds are met, a message is displayed and a network administrator is notified. At paragraph [0032], Schroath notes that after rebooting the printer, printing is reattempted, reducing the likelihood that the user will need to reprint the job. Schroath, at paragraph [0031], describes determining whether the print job or the printer is the source of the error. To do so, Garcia describes deleting the print job, if the error does not reoccur then the print job was the cause. If the error does reoccur then the printer is the culprit.

Consequently, even when combined, Bhatti, Garcia, and Schroath (individually and combined) fail to teach or suggest purging a time sensitive print job upon determining that the print job has expired where determining if the print job has expired includes identifying a time elapsed following the detection of the malfunction and determining if the identified elapsed time has exceeded a duration indicated by expiration data included with the print job.

For at least these reasons, Claim 1 is patentable over Bhatti alone and in combination with Garcia and/or Schroath.

Claim 5 is, as amended, directed to a computer readable medium having instructions for:

1. detecting a triggering event;
2. determining if a print job stored in a memory has been designated time sensitive following a detected triggering event; and
3. if the print job has been designated time sensitive, obtaining expiration data for the print job, determining if the print job has expired according to the expiration data, purging the print job from the memory, if the print job has expired;
4. wherein the detected triggering event is a malfunction that prevents, at least temporarily, the print job from being delivered to or printed by a printer; and

5. wherein determining if the print job has expired includes identifying a time elapsed following the detection of the malfunction and determining if the identified elapsed time has exceeded a duration indicated by the obtained expiration data.

Like Claim 1, Claim 5 was amended to clarify that the act of determining if the print job has expired include comparing a time elapsed following the malfunction detection and a duration indicated by the print job. If the elapsed time exceeds the indicated duration, the print job has expired and is purged. For at least the same reasons Claim 1 is patentable over Bhatti alone and in combination with Garcia and/or Schroath, so are Claim 5 and Claims 7-8 which depend from Claim 5.

Claim 11 is directed to a computer readable medium having instructions for:

1. identifying a malfunction that prevents, at least temporarily, a print job stored in a memory from being delivered to or printed by a printer;
2. upon identifying the malfunction, determining if the print job has expired; and
3. if expired, purging the print job from the memory,
4. wherein determining if the print job has expired includes obtaining expiration data included with the print job, identifying a time elapsed following the detection of the malfunction, and determining if the elapsed time has exceeded a duration indicated by the obtained expiration data.

Like Claim 1, Claim 11 was amended to clarify that the act of determining if the print job has expired include comparing a time elapsed following the malfunction detection and a duration indicated by the print job. If the elapsed time exceeds the indicated duration, the print job has expired and is purged. For at least the same reasons Claim 1 is patentable over Bhatti alone and in combination with Garcia and/or Schroath, so are Claim 11 and Claims 12-15 which depend from Claim 11.

Claim 16 is, as amended, directed to a method implementation of Claim 1. For at least the same reasons, Claim 1 is patentable over Bhatti alone and in combination with Garcia and/or Schroath, so is Claim 16.

Claim 20 is, as amended, directed to a method implementation of Claim 5. For at least the same reasons, Claim 5 is patentable over Bhatti alone and in combination with Garcia and/or Schroath, so are Claim 20 and Claims 22-23 which depend from Claim 20.

Claim 36 is directed to a print server and recites the following.

1. a queue for temporarily holding a print job; and
2. a queue manager capable of detecting a triggering event, determining, upon detection of a triggering event, if the print job held in the queue is time sensitive, and, if time sensitive, determining if the print job has expired, and purging the print job from the queue if the time sensitive print job has expired;
3. wherein the detected triggering event is a malfunction that prevents, at least temporarily, the print job from being delivered to or printed by a printer; and
4. wherein the queue manager is operable to determine if the print job has expired by identifying a time elapsed following the detection of the malfunction and determining if the identified elapsed time has exceeded a duration indicated by expiration data included with the print job.

In the spirit of Claim 1, Claim 36 was amended to clarify that the queue manager determines if the print job has expired by comparing a time elapsed following the malfunction detection and a duration indicated by the print job. If the elapsed time exceeds, the indicated duration, the print job has expired and is purged. For at least the same reasons Claim 1 is patentable over Bhatti alone and in combination with Garcia and/or Schroath, so is Claim 36.

Rejections Under 35 U.S.C. §103

The Examiner rejected Claims 9, 10, 24-35, 40, 41, and 43-45 as being unpatentable over US Pub 2003/0065404 to Bhatti in view of US Pub 2003/0105995 to Schroath and in further view of US Pub 2003/0112464 to Garcia.

Claim 9 is, as amended, directed to a computer readable medium having instructions for:

1. receiving instructions from an application to print an electronic document;
2. translating the instructions into a print job;
3. presenting a user interface having user accessible controls for designating the print job as time sensitive and for specifying expiration data; and
4. if so selected through the interface, designating the print job as time sensitive and including expiration data with the print job, the expiration data indicating a duration for holding the print job in a memory following a detection of a malfunction that prevents, at least temporarily, the print job from being delivered to or printed by a printer, the time sensitive designation indicating that the print job is to be purged from the memory upon identifying that a time elapsed following detection of the malfunction exceeds the duration included in the expiration data.

Like claim 1, Claim 9 has been amended to reflect that a print job designated as time sensitive is to be purged from memory following the detection of a malfunction if the print job has expired. The expiration data included with the print job indicates a duration. The time sensitive designation of the print job indicates that the print job is to be purged from the memory upon identifying that a time elapsed following detection of the malfunction exceeds the duration included in the expiration data. For at least the same reasons Claim 1 is patentable over Bhatti alone and in combination with Garcia and Schroath, so are Claim 9 and Claim 10 which depends from Claim 9.

Claim 24 is, as amended, directed to a method for designating a print job as time sensitive that includes the following.

1. receiving instructions from an application to print an electronic document;
2. translating the instructions into a print job;
3. presenting a user interface having user accessible controls for designating the print job as time sensitive and for specifying expiration data; and
4. if so selected through the interface, designating the print job as time sensitive and including expiration data with the print job, the expiration data indicating a duration for holding the print job in a memory following a detection of a malfunction that prevents, at least temporarily, the print job from being delivered to or printed by a printer, the time sensitive designation indicating that the print job is to be purged from the memory upon identifying that a time elapsed following detection of the malfunction exceeds the duration included in the expiration data.

Like claim 1, Claim 24 has been amended to reflect that a print job designated as time sensitive is to be purged from memory following the detection of a malfunction if the print job has expired. The expiration data included with the print job indicates a duration. The time sensitive designation of the print job indicates that the print job is to be purged from the memory upon identifying that a time elapsed following detection of the malfunction exceeds the duration included in the expiration data. For at least the same reasons Claim 1 is patentable over Bhatti alone and in combination with Garcia and Schroath, so are Claim 24 and Claim 25 which depends from Claim 24.

Claim 26 is, as amended, directed to a method for purging a print job that includes the following.

1. identifying a printer malfunction that, at least temporarily, prevents a print job stored in a memory from being delivered to or printed by a printer;

2. upon identifying the malfunction, determining if the stored print job has expired; and
3. if expired, purging the print job from the memory;
4. wherein determining if the print job has expired includes obtaining expiration data included with the print job, identifying a time elapsed following the detection of the malfunction, and determining if the elapsed time has exceeded a duration indicated by the obtained expiration data.

Like claim 1, Claim 26 has been amended to clarify that the act of determining if the print job has expired include comparing a time elapsed following the malfunction detection and a duration indicated by the print job. If the elapsed time exceeds the indicated duration, the print job has expired and is purged. For at least the same reasons Claim 1 is patentable over Bhatti alone and in combination with Garcia and Schroath, so are Claim 26 and Claims 27-30 which depend from Claim 26.

Claim 31 is, as amended, directed to a method for purging a print job that includes the following.

1. designating the print job as a time sensitive print job;
2. including expiration data in the print job, the expiration data indicating a duration;
3. queuing the time sensitive print job;
4. detecting a first malfunction that, at least temporarily, prevents the time sensitive print job from being delivered to or printed by a printer;
5. identifying a first time elapsed following the detection of the first malfunction; and
6. purging the time sensitive print job from the queue if the identified first elapsed time exceeds the duration indicated by the expiration data included with the print job.

Like claim 1, Claim 31 has been amended to clarify that the act of determining if the print job has expired include comparing a time elapsed following the malfunction detection and a duration indicated by the print job. If the elapsed time exceeds, the indicated duration, the print job has expired and is purged. For at least the same reasons Claim 1 is patentable over Bhatti alone and in combination with Garcia and Schroath, so are Claim 31 and Claims 32-34 which depend from Claim 31.

Claim 35 is directed to a system for printing and recites the following:

1. an application capable of instructing an electronic document to be printed; and
2. a driver capable of translating printing instructions from the application into a print job and of allowing a user to designate the print job as time sensitive and to specify and include expiration data with the print job;
3. wherein the expiration data indicates a duration for holding the print job in a memory following a detection of a malfunction that prevents, at least temporarily, the print job from being delivered to or printed by a printer, the time sensitive designation indicating that the print job is to be purged from the memory upon identifying that a time elapsed following detection of the malfunction exceeds the duration included in the expiration data.

Like claim 1, Claim 35 has been amended to reflect that a print job designated as time sensitive is to be purged from memory following the detection of a malfunction if the print job has expired. The expiration data included with the print job indicates a duration. The time sensitive designation of the print job indicates that the print job is to be purged from the memory upon identifying that a time elapsed following detection of the malfunction exceeds the duration included in the expiration data. For at least the same reasons Claim 1 is patentable over Bhatti alone and in combination with Garcia and Schroath, so is Claim 35.

Claim 40 is, as amended, directed to an imaging forming device that serves as an apparatus implementation of Claim 1. For at least the same reasons Claim 1 is patentable over Bhatti alone and in combination with Garcia and/or Schroath, so are Claim 40 and Claim 41 which depends from Claim 40.

Claim 43 is, as amended, directed to an image forming device that serves as an apparatus implementation of Claim 5. For at least the same reasons Claim 5 is patentable over Bhatti alone and in combination with Garcia and/or Schroath, so is Claim 43.

Claim 44 is directed to a printer driver capable of implementing the method of Claim 24. For at least the same reasons Claim 24 is patentable over Bhatti alone and in combination with Schroath, so is Claim 44.

Claim 45 is, as amended, directed to a system for purging a print job. The system includes the following:

1. a means for storing the print job in memory;
2. a means for identifying a printer malfunction that, at least temporarily, prevents the stored print job from being delivered to or printed by a printer;
3. a means for identifying a time elapsed since the malfunction was identified;
4. a means for comparing the identified elapsed time with a duration indicated by expiration data included with the print job to determine if the print job has expired; and
5. a means for purging the print job, if expired, from memory

Like claim 1, Claim 45 has been amended to clarify that the act of determining if the print job has expired include comparing a time elapsed following the malfunction detection and a duration indicated by the print job. If the elapsed time exceeds the indicated duration, the print job has expired and is purged. For at least the same

reasons Claim 1 is patentable over Bhatti alone and in combination with Schroath, so is Claim 45.

CONCLUSION

It is requested that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue.

Respectfully submitted,
Joe F. Goicoechea

By /Jack H. McKinney/
Jack H. McKinney
Reg. No. 45,685

June 2, 2008